RIVERSIDE CITY OF RIVERSIDE CALIFORNIA

PUBLIC WORKS DEPARTMENT

CHICAGO AVENUE EXTENSION

From A.T.S.F. R.R. to Columbia Ave.

PROJECT LENGTH: 975.39 FT. = 0.18 MI. = 0.29 KM.

T.I. = 7

CONSTRUCTION LEGEND

CENTER LINE
RIGHT-OF-WAY LINE
SUBDIVISION LOT LINE
TOP OF SLOPE
TOE OF SLOPE
DIRECTION OF FLOW

(A) *CONSTRUCT STRUCTURAL SECTION OF ~~0.75' A.C. OVER NATIVE SOIL OR~~ 0.35' A.C. OVER 1.00' BASE MATERIAL (MIN. R=70)

(B) CONSTRUCT STRUCTURAL SECTION OF 0.50' A.C. OVER NATIVE SOIL OR FILL.

(C) CONSTRUCT STRUCTURAL SECTION OF 0.90' A.C. OVER NATIVE SOIL OR FILL.

CONCRETE

(D) OVERLAY A.C. OR CONCRETE WITH A VARIABLE THICKNESS OF ASPHALT CONCRETE.

FILL & EARTH COVER AS SHOWN.

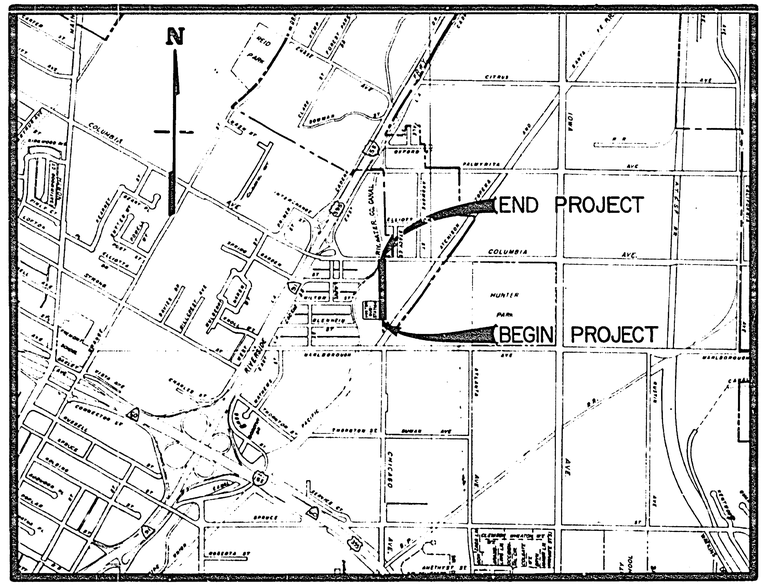
SPECIFIC CONSTRUCTION NOTES

- NUMBERS ABOVE 100 IN A HEXAGON ON THE PLAN REFER TO THE RESPECTIVE STANDARD DRAWING AND SHALL BE CONSTRUCTED ACCORDINGLY, UNLESS MODIFICATIONS ARE NOTED ON THE PLAN OR COVER SHEET BELOW. ANY NUMBER SHOWN BELOW THE STANDARD DRAWING NUMBER INDICATES THE SPECIFIC ALTERNATE TO BE CONSTRUCTED.

425 M — STANDARD CLEANOUT FOR DROP INLET WITH GRATING IN LIEU OF COVER, SEE SPECIAL PROVISIONS FOR ALTERNATE.

GENERAL CONSTRUCTION NOTES

1. A STATION OPERATOR MUST BE PRESENT IN STATION ANY TIME WORK IS DONE INSIDE FENCE. CALL 787-7944 (BOB THOMAS) AT LEAST 2 DAYS PRIOR TO BEGINNING WORK.
2. STATION SECURITY MUST BE MAINTAINED AT ALL TIMES. (SEE SPECIAL PROVISIONS)
3. RIGHTS OF ENTRY HAVE BEEN OBTAINED FOR WORK SHOWN ON PRIVATE PROPERTY.
4. ALL ELEVATIONS SHOWN ON THE PLAN SHALL BE STAKED IN THE FIELD.
5. SITE GRADING EAST OF THE PROJECT MAY HAVE REMOVED EXISTING FACILITIES SHOWN ON THE PLANS.



PROJECT LOCATION PLAN

0KM 0.5 KM. 1KM 1.5 KM.
0' 500' 1000' 2000' 3000' 4000' 5000' 6000'

SCALE 1" = 1000'

EXISTING UNDERGROUND & TOPOGRAPHY LEGEND

EXISTING UNDERGROUND UTILITIES:

SANITARY SEWER	8"S	TELEPHONE CONDUIT	T
WATER LINE	6"W	ELECTRICAL CONDUIT	E
STORM DRAIN	24" D	STREET LIGHTING	SL
GAS LINE	4"G	TRAFFIC SIGNAL	SIG
IRRIGATION LINE	20" IRR	FIRE ALARM	F

EXISTING TOPOGRAPHY:

BLOCK WALL
BOARD FENCE
WIRE FENCE
CHAIN LINK FENCE
TOP OF SLOPE
TOE OF SLOPE
DIRECTION OF FLOW

SANITARY SEWER MH
SANITARY SEWER CLEANOUT
STORM DRAIN MH
IRRIGATION VALVE
WATER MH
GAS MH
ELECTRIC MH
TELEPHONE MH OR VAULT
WATER METER
FIRE HYDRANT
SPRINKLER HEAD
VALVE
AIR VALVE
AIR VENT
POLE W GUY ANCHOR
ELECTRIC POLE
TELEPHONE POLE
JOINT USE POLE
PULL BOX
TRAFFIC SIGN
PARKING METER
FIRE ALARM BOX
STREET NAME SIGN
GAS METER
MAIL BOX
FAUCET
TELEPHONE RISER
WHEEL STOP
AC BERM
STEEL POST
WOOD POST
PEDESTRIAN PUSH BUTTON
RAILROAD TRACKS
RAILROAD SIGN
RAILROAD SIGNAL
STREET LIGHT & TRAFFIC SIGNAL ON MAST ARM
STREET LIGHT (UPRIGHT)
STREET LIGHT
TRAFFIC SIGNAL
TRAFFIC SIGNAL ON MAST ARM
TRAFFIC SIGNAL CONTROLLER
TRAFFIC SIGNAL PRESSURE DETECTOR
TRAFFIC SIGNAL LOOP DETECTOR

CONCRETE
ASPHALT
EDGE OF PAVEMENT
BUILDING
UNDERGROUND STRUCTURE
OVERHANGING STRUCTURE

CITRUS TREE
DECIDUOUS TREE OR
PALM TREE OR
SHRUBBERY OR
TREE STUMP
EVERGREEN

SHEET INDEX:

SHEET 1 TITLE SHEET
SHEET 2 SECTIONS & DETAILS, SUBSTATION GROUNDING, WALL DETAIL
SHEET 3 PLAN & PROFILE
SHEET 4 CANAL COVER & DRAINAGE
~~SHEET 5 LANDSCAPE IRRIGATION~~
~~SHEET 6 LANDSCAPE PLANTING~~ } DELETED

TRAFFIC SIGN SCHEDULE

TYPE	SIZE	QUANTITY
"N"	18" X 18"	5 EA.
R1	30" OCTOGON	1 EA.
R7	24" X 30"	3 EA.
R10 (RT)	48" X 16"	2 EA.
W31	30" X 30"	1 EA.
W53	36" X 36"	1 EA.

* AS BUILT 11-17-77 B

INDEXED TCR

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

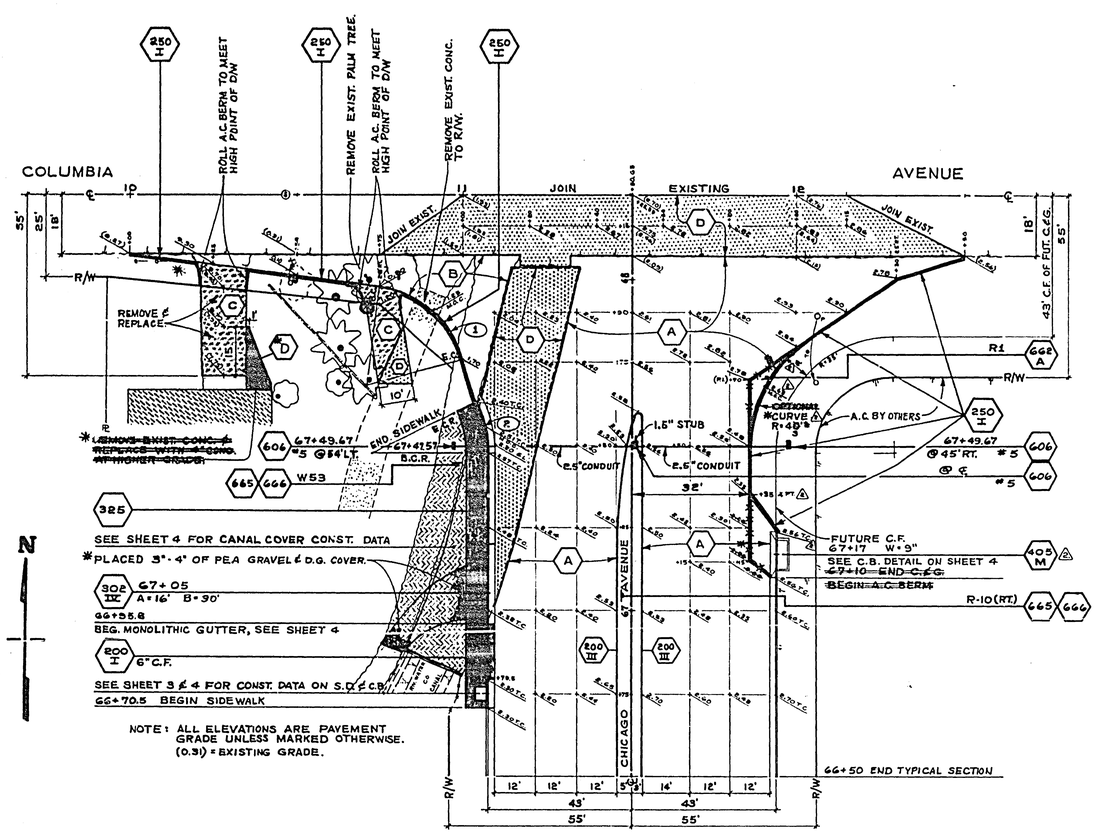
APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		4/30
PARK DEPARTMENT		
TRAFFIC DIVISION		4/26/77
CHIEF P.W. ENGINEER		4-26

APPROVED BY: PUBLIC WORKS DIRECTOR
DATE 4-27-77

CHICAGO AVENUE EXTENSION
From A.T.S.F. R.R. to Columbia Ave.

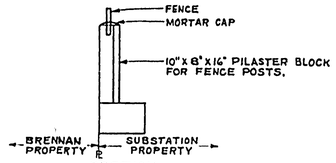
DESIGNED BY DEH DRAWN BY B CHECKED BY

ACCOUNT No. 30575-200 30
DRAWING NUMBER R-1939
SHEET 1 OF 6



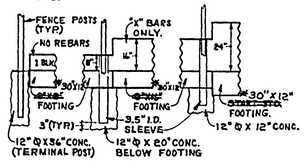
INTERSECTION DETAIL

SCALE 1"=20'



SECTION

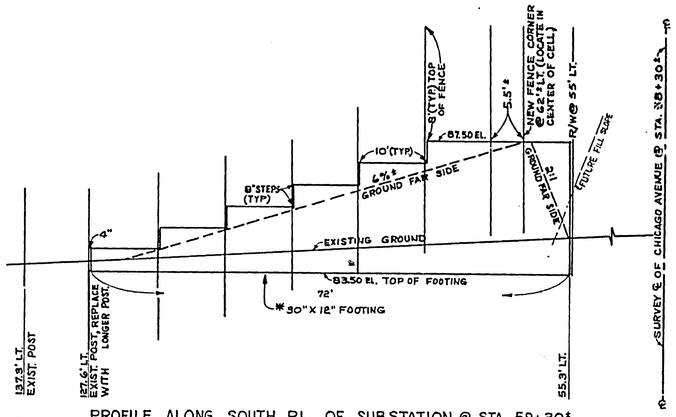
N.T.S.



END DETAIL

N.T.S.

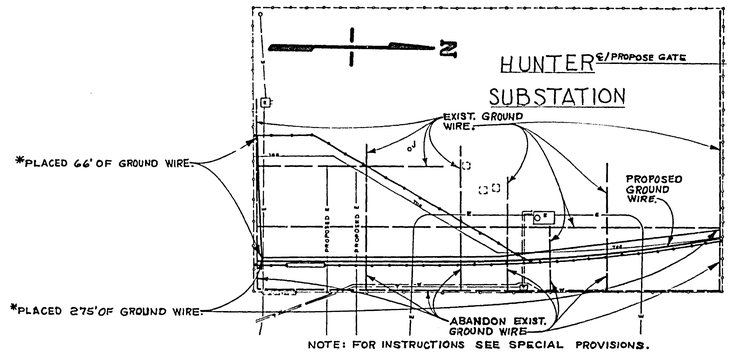
NOTE: USE STD. DWG. 707 (UNDER 5')



PROFILE ALONG SOUTH P.L. OF SUBSTATION @ STA. 58+30±

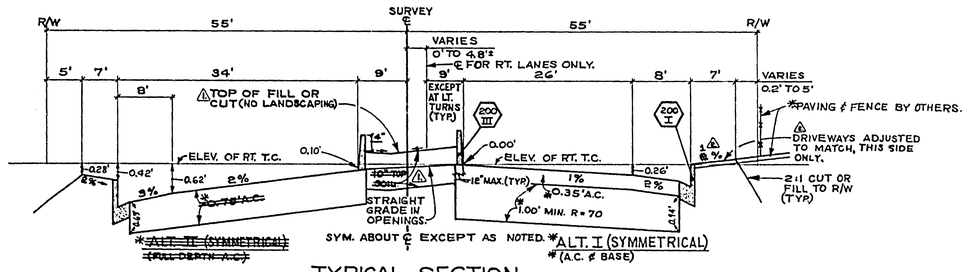
SCALE H: 1"=10' V: 1"=2'

SUB-STATION RETAINING WALL DETAILS



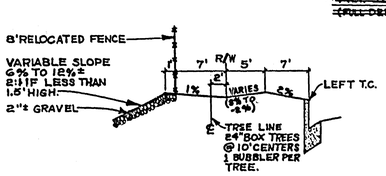
SUBSTATION GROUNDING DETAIL

SCALE 1"=40'



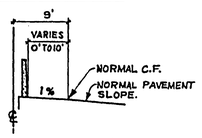
TYPICAL SECTION

N.T.S.



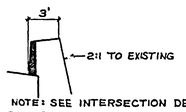
SECTION AT SUBSTATION

N.T.S.



LEFT TURN LANES

N.T.S.



NOTE: SEE INTERSECTION DETAIL ABOVE.

SECTION AT BERM

N.T.S.

CURVE DATA				
INDEX	R	Δ	T	L
1	30'	67° 30' 00"	20.05'	35.34'
2	35'	26° 37' 45"	8.28'	16.27'

APPROVED BY:

Donald J. Cougar 7-22-77

SUBSTATION ENGINEER, R.U.D. DATE

MARK	REVISIONS	APPD	DATE
1	DELETE TOP SOIL		6-7-77
2	ADDED C.B. @ STA. 67+17 & CHANGED CROSS SLOPE RIGHT SIDE.		7-26-77

DESIGNED BY: RCH DRAWN BY: CHECKED BY: WLK

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVAL BY	DATE	BY
PRINCIPAL ENGINEER	9/26	
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF ENGINEER	4-26	

APPROVED BY: PUBLIC WORKS DIRECTOR

DATE 7-26-77

* AS BUILT 11-17-77

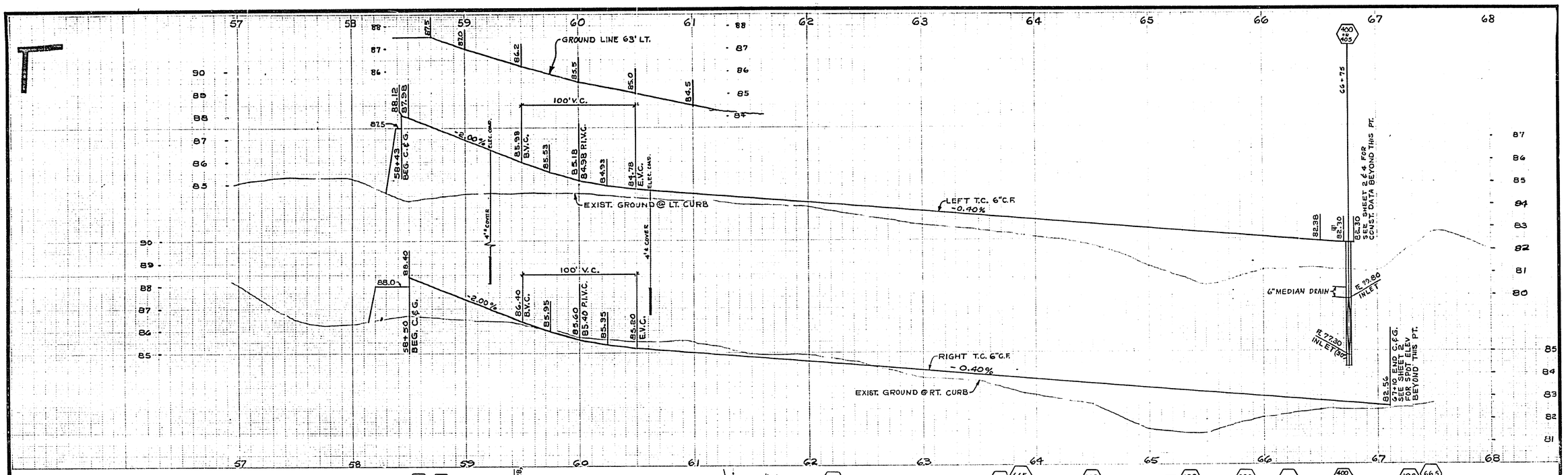
CHICAGO AVENUE EXTENSION

From A.T.S.F. R.R. to Columbia Ave.

ACCOUNT NO. 30-575-200-30

R-1939

SHEET 2 OF 6



-CAUTION-
PACIFIC TELEPHONE CABLES UNDERGROUND BEFORE EXCAVATING
CALL COLLECT:

	7:30 A.M. to 5 P.M.	After Hours & Holidays
Orange County	714-633-0811	714-547-6606
Riverside County	714-684-0071	714-547-6606
Inyo County	714-684-0071	714-547-6606
San Bernardino County	714-684-0071	714-547-6606
Los Angeles County	213-621-3111	24 HOUR SERVICE
Ventura County	213-621-3111	
San Diego County	714-298-0595	714-232-0027

FOR FREE CABLE LOCATING SERVICE

F.B. 990/77
ELEV. 886.90
B.M. NORTH WESTERLY BOLT ON RXR LIGHTS 82' ± SOUTHERLY OF ℄ MARLBOROUGH & 18' ± WESTERLY OF THE WESTERLY RAIL OF A.T.&S.F. R.R.

APPROVED BY:
DONALD J. COLGAN
SUBSTATION ENGINEER, R.U.D.
4-22-77
DATE

CURVE	Δ	R	T	L
1	13°28'05"	1000'	118.07'	235.06'
2	13°28'05"	957'±	113.00'	224.95'
3	13°28'05"	1049'±	123.15'	245.17'

MARK	REVISIONS	APPR	DATE
1	D/W & SIGN CHANGES, ADDED WATER SERVICES, ADDED FACILITIES FOR FUTURE LANDSCAPING		6-7-77
2	ADDED C.B. STA 67+17 RT. & WORK BY OTHERS.		7-22-77

DESIGNED BY ___ DRAWN BY ___ CHECKED BY ___

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
PRINCIPAL ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF P.W. ENGINEER		

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 4-26-77

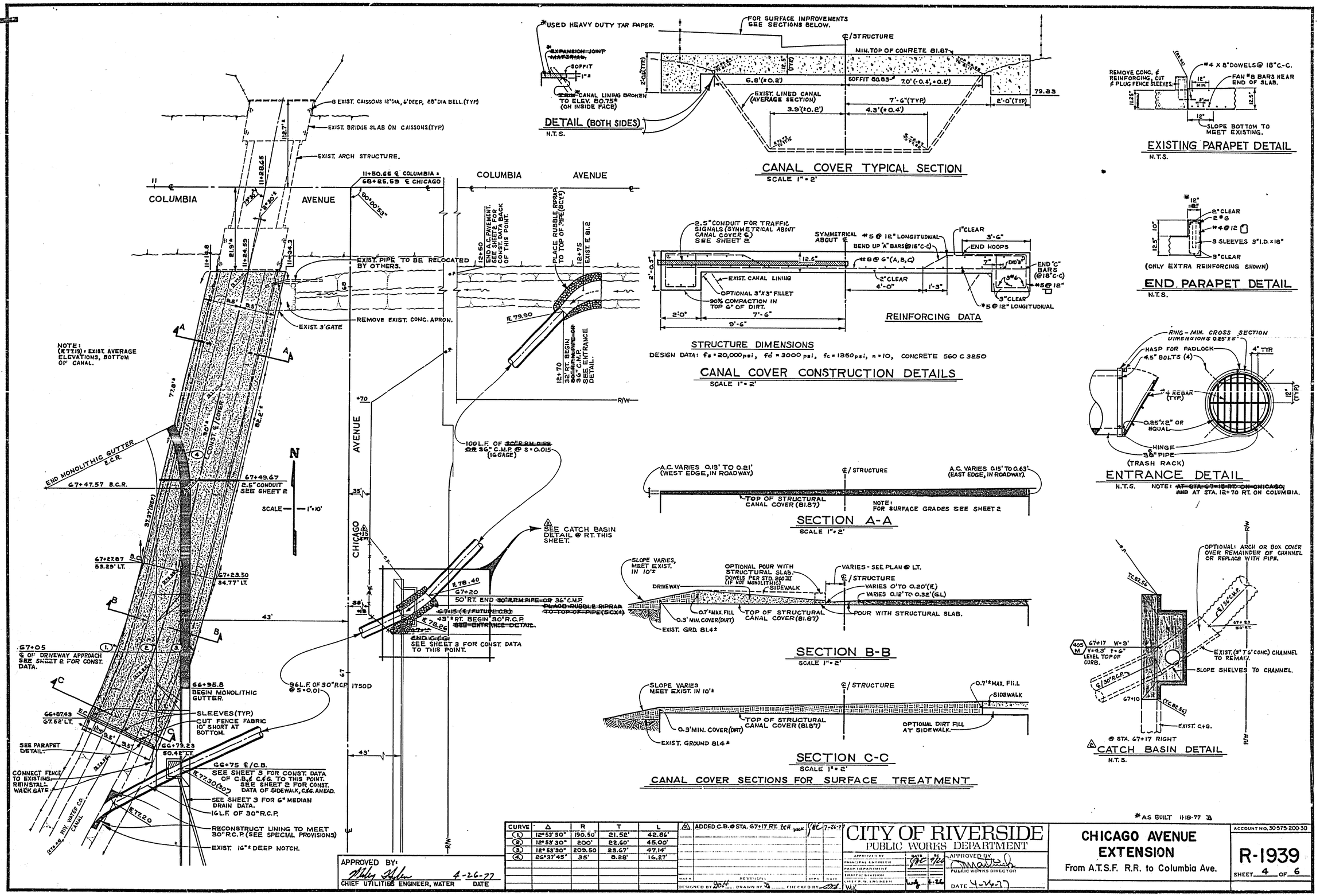
CHICAGO AVENUE EXTENSION
From A.T.S.F. R.R. to Columbia Ave.

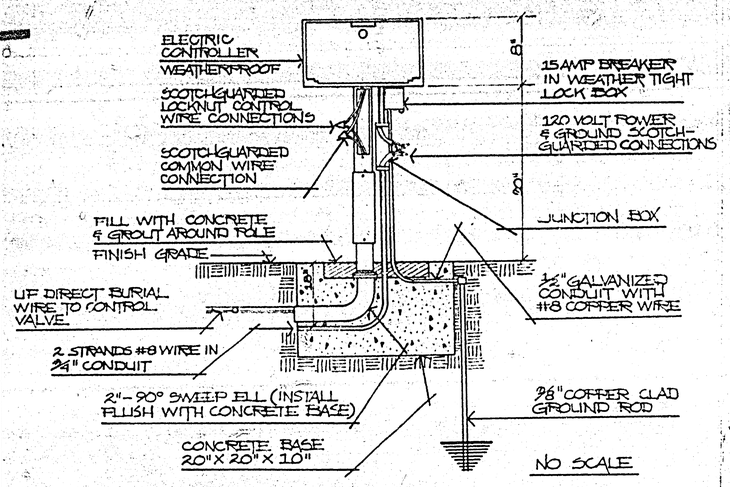
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 2'

ACCOUNT NO. 30-575-200-30

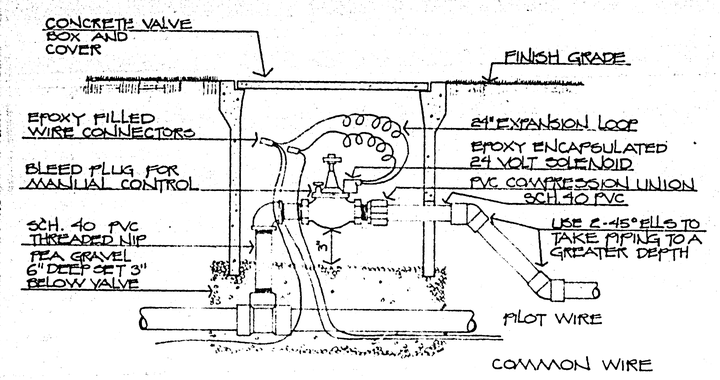
R-1939

SHEET 3 OF 6

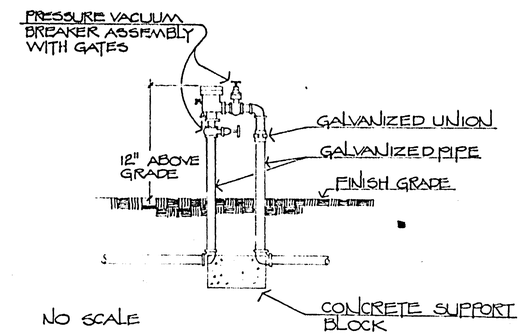

*USED HEAVY DUTY TAR PAPER.
~~*EXPANSION JOINT MATERIAL~~
SOFFIT
1"±
~~CANAL LINING BROKEN TO ELEV. 80.75±~~ (ON INSIDE FACE)
DETAIL (BOTH SIDES)
N.T.S.
FOR SURFACE IMPROVEMENTS SEE SECTIONS BELOW.
℄/STRUCTURE
MIN. TOP OF CONRETE 81.87
2'-0"(TYP)
12.5" (TYP)
6.8'(±0.2')
SOFFIT 80.83
7.0'(-0.4', +0.2')
79.83
EXIST. LINED CANAL (AVERAGE SECTION)
7'-6"(TYP)
2'-0"(TYP)
3.9'(±0.2')
4.3'(±0.4')
CANAL COVER TYPICAL SECTION
SCALE 1" = 2'
#4 X 8" DOWELS @ 18" C.-C.
REMOVE CONC. & REINFORCING, CUT & PLUG FENCE SLEEVES.
FAN #8 BARS NEAR END OF SLAB.
12" MIN.
SLOPE BOTTOM TO MEET EXISTING.
EXISTING PARAPET DETAIL
N.T.S.
*12"
2" CLEAR
2 #6
#4 @ 12
3 SLEEVES 3" I.D. x 18"
3" CLEAR
(ONLY EXTRA REINFORCING SHOWN)
END PARAPET DETAIL
N.T.S.
2.5" CONDUIT FOR TRAFFIC SIGNALS (SYMMETRICAL ABOUT CANAL COVER ℄) SEE SHEET 2
SYMMETRICAL ABOUT ℄
#5 @ 12" LONGITUDINAL
BEND UP "A" BARS @ 18" C-C
1" CLEAR
3'-6"
END HOOPS
12.6"
#8 @ 6" (A, B, C)
EXIST. CANAL LINING
OPTIONAL 3" X 3" FILLET
90% COMPACTION IN TOP 6" OF DIRT.
2" CLEAR
4'-0"
1'-3"
END "C" BARS (@ 18" C-C)
#5 @ 12"
3" CLEAR
#5 @ 12" LONGITUDINAL
2'0"
7'-6"
9'-6"
REINFORCING DATA
STRUCTURE DIMENSIONS
DESIGN DATA: fs = 20,000 psi, fc = 3000 psi, fc = 1350 psi, n = 10, CONCRETE 560 C 3250
CANAL COVER CONSTRUCTION DETAILS
SCALE 1" = 2'
RING - MIN. CROSS SECTION DIMENSIONS 0.25" X 2"
HASP FOR PADLOCK
4.5" BOLTS (4)
4" TYP
#4 REBAR (TYP)
0.25" X 2" OR EQUAL
HINGE
36" PIPE
(TRASH RACK)
ENTRANCE DETAIL
N.T.S.
NOTE: ~~AT STA. 67+15 RT. ON CHICAGO~~ AND AT STA. 12+70 RT. ON COLUMBIA.
A.C. VARIES 0.13' TO 0.21' (WEST EDGE, IN ROADWAY)
℄/STRUCTURE
A.C. VARIES 0.15' TO 0.63' (EAST EDGE, IN ROADWAY).
TOP OF STRUCTURAL CANAL COVER (81.87)
NOTE: FOR SURFACE GRADES SEE SHEET 2
SECTION A-A
SCALE 1" = 2'
SLOPE VARIES, MEET EXIST. IN 10'±
OPTIONAL POUR WITH STRUCTURAL SLAB. DOWELS PER STD. 200 III (IF NOT MONOLITHIC)
VARIES - SEE PLAN @ LT.
℄/STRUCTURE
DRIVEWAY
SIDEWALK
VARIES 0' TO 0.20' (℄)
VARIES 0.12' TO 0.32' (GL)
0.7'± MAX. FILL
TOP OF STRUCTURAL CANAL COVER (81.87)
POUR WITH STRUCTURAL SLAB.
0.3' MIN. COVER (DIRT)
EXIST. GRD. 81.4±
SECTION B-B
SCALE 1" = 2'
SLOPE VARIES MEET EXIST. IN 10'±
℄/STRUCTURE
0.7'± MAX. FILL
SIDEWALK
TOP OF STRUCTURAL CANAL COVER (81.87)
0.3' MIN. COVER (DIRT)
OPTIONAL DIRT FILL AT SIDEWALK.
EXIST. GROUND 81.4±
SECTION C-C
SCALE 1" = 2'
CANAL COVER SECTIONS FOR SURFACE TREATMENT
OPTIONAL: ARCH OR BOX COVER OVER REMAINDER OF CHANNEL OR REPLACE WITH PIPE.
℄ 36" C.M.P.
67+80 80' RT.
405 M
67+17 W=9'
V=4.3' t=6"
LEVEL TOP OF CURB.
EXIST. (8" T 6" CONC) CHANNEL TO REMAIN.
SLOPE SHELVES TO CHANNEL.
℄ 30" R.C.P.
67+10
EXIST. C+G.
@ STA. 67+17 RIGHT
CATCH BASIN DETAIL
N.T.S.
8 EXIST. CAISSONS 12" DIA., 6' DEEP, 28" DIA BELL. (TYP)
EXIST. BRIDGE SLAB ON CAISSONS. (TYP)
EXIST. ARCH STRUCTURE.
11+50.65 ℄ COLUMBIA = 68+25.59 ℄ CHICAGO
COLUMBIA AVENUE
EXIST. PIPE TO BE RELOCATED BY OTHERS.
REMOVE EXIST. CONC. APRON.
EXIST. 3' GATE
END A.C. PAVEMENT. SEE SHEET 2 FOR CONSTRUCTION BACK OF THIS POINT.
PLACE RUBBLE RIPRAP TO TOP OF PIPE (8 CY±)
12+75 EXIST. ℄ 81.2
℄ 79.90
12+70 32' RT. BEGIN 30" C.M.P. 36" C.M.P. SEE ENTRANCE DETAIL.
R/W
NOTE: (℄ 77.19) = EXIST. AVERAGE ELEVATIONS, BOTTOM OF CANAL.
END MONOLITHIC GUTTER
67+47.57 B.C.R.
67+49.67 2.5" CONDUIT SEE SHEET 2
SCALE — 1" = 10'
N
100 L.F. OF ~~30" R.M. PIPE OR~~ 36" C.M.P. @ S = 0.015 (14 GAGE)
SEE CATCH BASIN DETAIL @ RT. THIS SHEET.
67+27.87 B.C. 53.25' LT.
67+23.50 34.77' LT.
℄ 78.40
67+20
50' RT. END ~~30" R.M. PIPE OR~~ 36" C.M.P. ~~PLACE RUBBLE RIPRAP TO TOP OF PIPE (5 CY±)~~
~~67+15 (℄ FUTURE C.B.)~~
43' ± RT. BEGIN 30" R.C.P. ~~SEE ENTRANCE DETAIL.~~
℄ 78.26
~~END C.C.C.~~
SEE SHEET 3 FOR CONST. DATA TO THIS POINT.
67+05 ℄ OF DRIVEWAY APPROACH SEE SHEET 2 FOR CONST. DATA.
66+95.8 BEGIN MONOLITHIC GUTTER.
96 L.F. OF 30" R.C.P. @ S = 0.01
SLEEVES (TYP)
CUT FENCE FABRIC 10' SHORT AT BOTTOM.
66+87.43 67.52' LT.
66+79.23 50.42' LT.
SEE PARAPET DETAIL.
66+75 ℄/C.B.
SEE SHEET 3 FOR CONST. DATA OF C.B. & C.&G. TO THIS POINT. SEE SHEET 2 FOR CONST. DATA OF SIDEWALK, C.&G. AHEAD.
CONNECT FENCE TO EXISTING. REINSTALL WALK GATE
℄ 77.30 (30")
SEE SHEET 3 FOR 6" MEDIAN DRAIN DATA.
16 L.F. OF 30" R.C.P.
℄ 77.20
RIV. WATER CO. CANAL
RECONSTRUCT LINING TO MEET 30" R.C.P. (SEE SPECIAL PROVISIONS)
EXIST. 16" ± DEEP NOTCH.
COLUMBIA AVENUE
CHICAGO AVENUE
R/W
APPROVED BY:
CHIEF UTILITIES ENGINEER, WATER
4-26-77
DATE
CURVE | Δ | R | T | L
1 | 12°53'30" | 190.50' | 21.52' | 42.86'
2 | 12°53'30" | 200' | 22.60' | 45.00'
3 | 12°53'30" | 209.50 | 23.67' | 47.14'
4 | 26°37'45" | 35' | 8.28' | 16.27'
MARK | REVISIONS | APPR. | DATE
A | ADDED C.B. @ STA. 67+17 RT. BCH | | 7-26-77
DESIGNED BY | DRAWN BY | CHECKED BY
CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT
APPROVED BY: PRINCIPAL ENGINEER, PARK DEPARTMENT, TRAFFIC DIVISION, CHIEF P.W. ENGINEER
DATE
APPROVED BY: PUBLIC WORKS DIRECTOR
DATE 4-26-77
CHICAGO AVENUE EXTENSION
From A.T.S.F. R.R. to Columbia Ave.
ACCOUNT NO. 30-575-200-30
R-1939
SHEET 4 OF 6
*AS BUILT 11-18-77



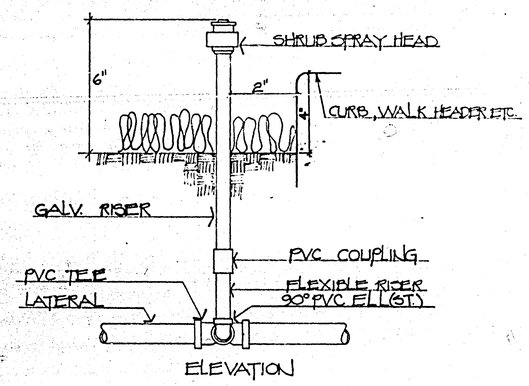
CONTROL DETAIL

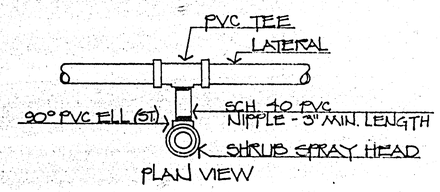


REMOTE CONTROL VALVE

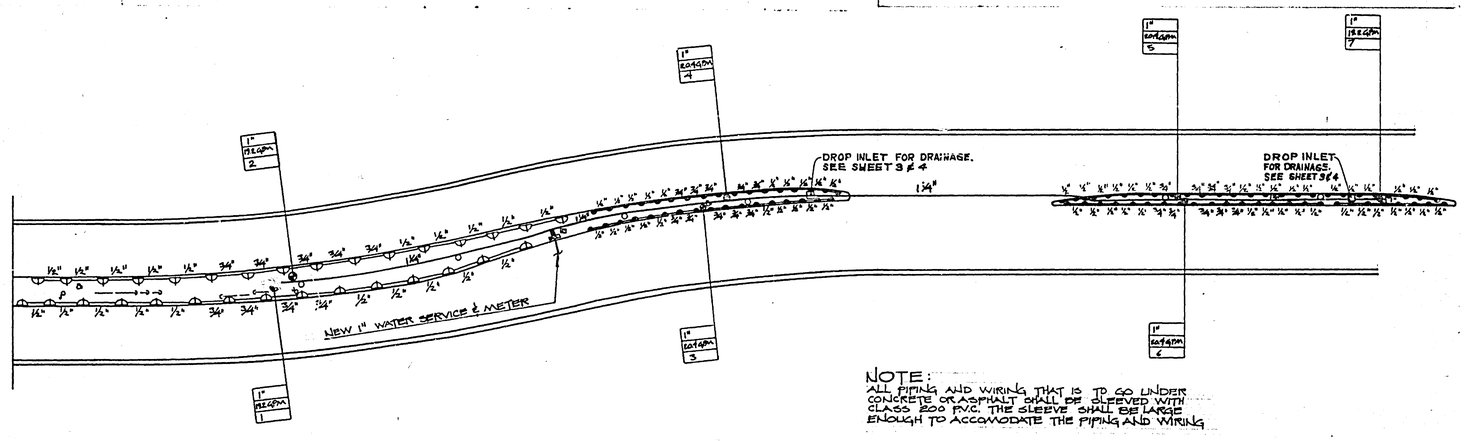


PRESSURE VACUUM BREAKER

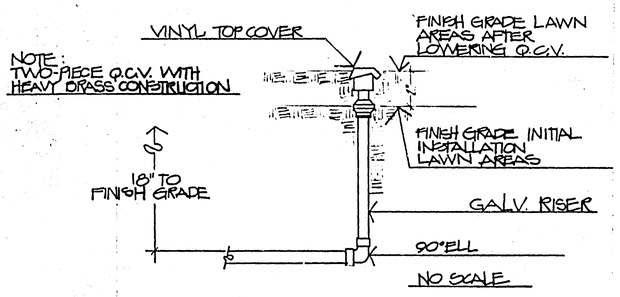




SHRUB SPRAY HEAD DETAIL



NOTE:
ALL PIPING AND WIRING THAT IS TO GO UNDER CONCRETE OR ASPHALT SHALL BE SLEEVED WITH CLASS 200 PVC. THE SLEEVE SHALL BE LARGE ENOUGH TO ACCOMODATE THE PIPING AND WIRING



NOTE:
TWO-PIECE Q.C.V. WITH HEAVY BRASS CONSTRUCTION

QUICK COUPLER VALVE

NORTH
SCALE: 1" = 40'

IRRIGATION LEGEND

"DELETED"
8/31/77 PER G.K.

symbol	manufacturer	model no.	description	nozzle	radius	g.p.m.	p.s.i	pattern
	THOMPSON	117 H6	BRASS SHRUB HEAD		8'	1.2	12	HALF
	THOMPSON	117 M6H	BRASS SHRUB HEAD		13'	1.2	25	HALF
	RAINBIRD	EFA 100	ELECTRIC CONTROL VALVE W/ BRASS BOOT & FLOW CONTROL					
			SIGNIFIES VALVE SIZE					
			" GPM OF STATION					
			" STATION NUMBER					
	FEBCO	765	PRESSURE VACUUM BREAKER 1"					
	C		CLASS 200 PVC LATERAL LINE					
			SCHEDULE 40 PVC MAIN LINE					
	RAINBIRD	RAINCLOX RC-8A-DP	ELECTRIC CONTROLLER 8 STATION					
	RAINBIRD	44-44K	1" 2 PIECE QUICK COUPLER W/ LOCKING TOP					

MARK	REVISIONS	APPR.	DATE

DESIGNED BY G.K. DRAWN BY G.K. CHECKED BY R.L.

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		4/26
PARK DEPARTMENT		4/26
TRAFFIC DIVISION		
CHIEF P. W. ENGINEER		4-26

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 4-26-77

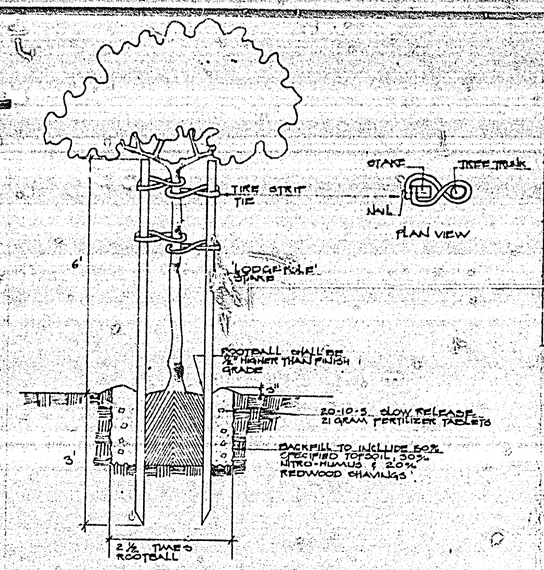
CHICAGO AVENUE EXTENSION
irrigation plan
FROM A.T.&S.F. R.R. TO COLUMBIA AVE.

ACCOUNT No. 30-575-200-30

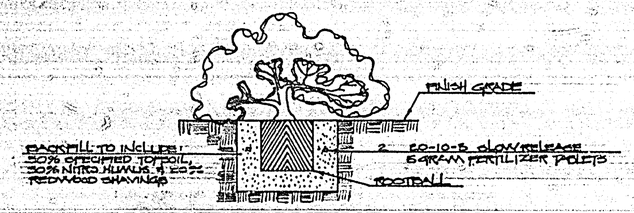
R-1939

SHEET 5 OF 6

"DELETED"



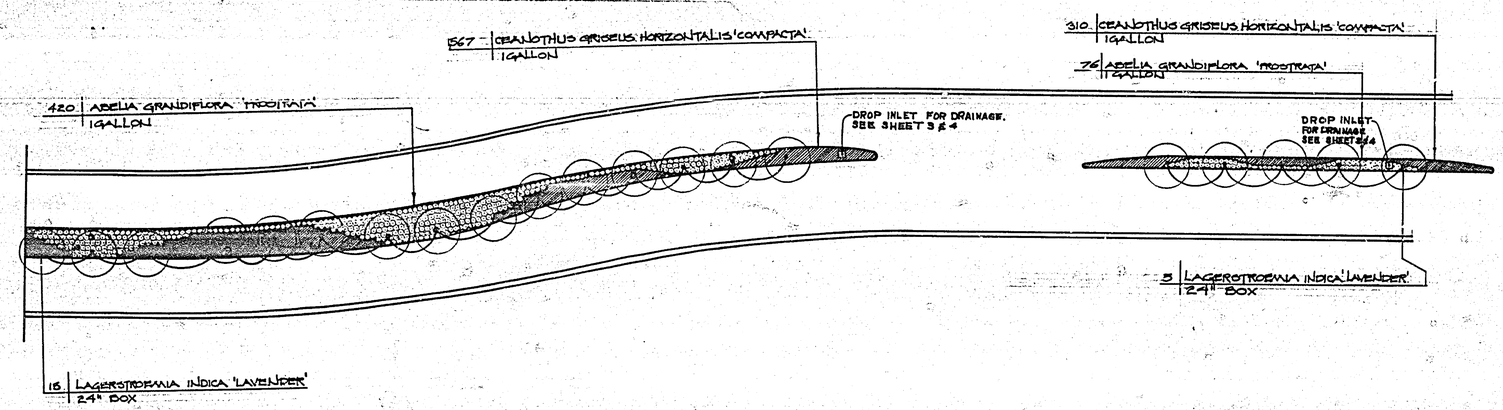
TREE STAKING DETAIL



SHRUB PLANTING DETAIL

PLANT LIST

botanical name	common name	size	quantity	remarks
TREES				
LAGERSTROEMIA INDICA 'LAVENDER'	PURP. CRAPE MYRTLE	24" BOX	20	STANDARD TREE.
SHRUBS				
ABELIA GRANDIFLORA 'PROSTRATA'		1 GALLON	496	PLANT 3½' O.C.
CEANOTHUS GRISEUS HORIZONTALIS 'COMPACTA'	COMPACT CARMEL CEANOTHUS	1 GALLON	1877	PLANT 3' O.C.



NORTH
SCALE: 1" = 40'

"DELETED"
8/31/77 PER G.K.

MARK	REVISIONS	APPR.	DATE

DESIGNED BY G.R.K. DRAWN BY G.R.K. CHECKED BY R.L.

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY		DATE
PRINCIPAL ENGINEER		4/14
PARK DEPARTMENT		4/14
TRAFFIC DIVISION		4/14
CHIEF P. W. ENGINEER		4-26

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 4-14-77

CHICAGO AVENUE EXTENSION
planting plan
FROM A.T.&S.F. R.R. TO COLUMBIA AVE.

ACCOUNT NO. 30-575-200-30
R-1939
SHEET 6 OF 18

"DELETED"